

Abstract of the Disclosure

LINEAR CONTROL VALVE FOR CONTROLLING A FUEL INJECTOR
AND ENGINE COMPRESSION RELEASE BRAKE ACTUATOR AND
ENGINE USING SAME

A linear control valve is disclosed regulating the flow of fluid to hydraulically activated devices, preferably a fuel injector and an engine compression release brake. The valve includes a valve member that is moveable between a first position in which the fuel injector is, at least partially, activated, a second position in which neither the fuel injector nor the engine compression release brake is activated, and a third position in which the engine compression release brake is activated. An electrical actuator providing two permanent magnets and two oppositely wound solenoid coils moves the valve member between its three positions. The polarity of the permanent magnets are oriented such that when the solenoids are energized, one solenoid coil pulls the valve member while the other solenoid coil pushes the valve member in the same direction.